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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,910	09/21/2000	Anna Maria Zara	10002185-1	7529

7590 09/26/2005  
 Hewlett Packard Company  
 Intellectual Property Administration  
 PO Box 272400  
 Fort Collins, CO 80528-9599

EXAMINER

BORISSOV, IGOR N

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/666,910	ZARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Igor Borissov	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Response to Amendment*

Amendment received on 6/30/2005 is acknowledged and entered. Claims 1, 9 and 14 have been amended. Claims 1-19 are currently pending in the application.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi et al. (US 6,728,748) in view of Masters (US 6,374,300).**

### Independent Claims

**Claims 1 and 9.** Mangipudi teaches a server system and method for categorization of traffic to permit flexible design and implementation of multiple Class of Service levels, said system comprising a request processor that schedules requests from external clients (Fig. 2; server 202; C. 7, L. 5-6; C. 17, 45-46); an application system coupled to the server system (back-end servers 206); a business rule engine that stores business rules regarding classification of various transactions (C. 9, L. 56-61) and a tag (cookie) generator, said method comprising:

storing business rules regarding classification of responses to various externally requested transactions in a business rule engine (C. 4, L. 31-33, 49-51);

receiving an access request in the application system from the server system, wherein the access request is requesting the application system to perform an externally requested transaction and to generate a response for the request (C. 4, L. 36-40);

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using the business rules to analyze the response to obtain the classification information of the transaction response (C. 9, L. 56-61; C. 6, L. 4-13);

generating a tag (cookie) and

sending the tag (cookie) to a requesting client that issued the request such that the tag is attached to subsequent external requests to the data service system (classifying incoming requests into classes based on *cookies*, C. 17, L. 46-49, which indicates the prior steps of generating said tag (cookie) containing information used for said classification and sending said tag (cookie) to a requesting client);

scheduling (prioritizing) requests to be serviced by the server system based at least in part on the classification information contained in the tag of each of the subsequent external requests (C. 6, L. 13; C. 17, L. 46-49);

wherein the classification information is based on a priority-based classification (C. 7, L. 40-45).

While Mangipudi teaches conducting classification of requests based on information contained in cookie (C. 17, L. 46-49), Mangipudi does not explicitly teach that the information contained in cookie includes *classification* information.

Masters teaches a method and system for storing load balancing information with an HTTP cookie, wherein information contained in the cookie includes *priority* (classification) information that identifies a *priority for processing the HTTP request* and/or *response* prior to the processing of the other HTTP communications (C. 3, L. 54-60). Furthermore, Masters teaches insertion the cookie into the client request: receiving a request for a resource; generating an HTTP response by providing access to the requested resource; inserting a copy of cookie information in the cookie, and sending the HTTP response with the copy of the information in the cookie to the sender of the HTTP request, so that a subsequent HTTP request to access the resource will include another cookie with information indicating that the resource is accessible at the destination (C. 2, L. 32-41).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mangipudi to include that the information contained in cookie includes classification (priority) information, as disclosed in Masters, because it

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would advantageously allow to identify and prioritize revenue generating transactions over no-revenue generating transactions, as specifically stated in Mangipudi (C. 10, L. 24-25).

As per "back-end" classification, this information cannot affect the recited method steps, and does not include a structural limitation, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*" The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI (example 3): a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed. The method steps, recited in Claim 9 would be performed the same regardless whether said priority-based classification information is back-end classification information, or not.

**Claim 14.** Mangipudi teaches said server system for categorization of traffic to permit flexible design and implementation of multiple Class of Service levels, said system comprising:

- a request processor configured for establishing a classification of each of the requests that is classified (C. 9, L. 56-61); scheduling the requests according to their respective classification (C. 6, L. 13; C. 17, L. 46-49); assigning a default classification to requests that are not classified (C. 13, L. 3-5, 11-15);

- a server module configured for servicing the requests as scheduled (C. 13, L. 5-15);

- an application system having an application engine configured for performing requested transactions in response to the scheduled requests, and providing responses to the scheduled requests about the requested transactions (Fig. 2; back-end servers 206);

- a business rule engine configured for storing business rules pertaining to transaction classifications, analyzing responses based on the business rules (C. 9, L. 56-61);

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a tag generator configured for generating, and regenerating, transaction information that correspondingly attach to the responses before they are returned to the clients, each transaction information being associated with a particular session and being used with any subsequent requests within that session (classifying incoming requests into classes based on *cookies*, C. 17, L. 46-49 indicates the prior steps of generating said tag (cookie) by means of tag (cookie) generator, said tag (cookie) containing information used for said classification);

a database configured to serve as a repository for the data service system and for interacting with the application system in relation to the requested transactions (Fig. 2, items 206a, 206b and 206c);

wherein each transaction classification is based on a respective priority-based classification (C. 7, L. 40-45).

While Mangipudi teaches the tag generator configured for generating, and regenerating, transaction information that correspondingly attach to the responses before they are returned to the clients, (C. 17, L. 46-49), Mangipudi does not explicitly teach that said information generated by the tag generator and is attached to the responses (contained in cookie) includes *classification* information.

Masters teaches said system for storing load balancing information with an HTTP cookie, wherein information contained in the cookie includes *priority* (classification) information that identifies a *priority for processing the HTTP request and/or response* prior to the processing of the other HTTP communications (C. 3, L. 54-60). Furthermore, Masters teaches insertion the cookie into the client request: receiving a request for a resource; generating an HTTP response by providing access to the requested resource; inserting a copy of cookie information in the cookie, and sending the HTTP response with the copy of the information in the cookie to the sender of the HTTP request, so that a subsequent HTTP request to access the resource will include another cookie with information indicating that the resource is accessible at the destination (C. 2, L. 32-41).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mangipudi to include that the information contained in cookie includes classification (priority) information, as disclosed in Masters, because it

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would advantageously allow to identify and prioritize revenue generating transactions over no-revenue generating transactions, as specifically stated in Mangipudi (C. 10, L. 24-25).

Information as to "wherein the classification information is based on a priority-based back-end classification" is non-functional data and given no patentable weight. MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*"

### Dependent Claims

**Claim 2.** Mangipudi teaches said system, wherein said processor is configured to employ said rules based engine to determine the classification of the transaction and generate cookie identifying the class of the transaction and sending said cookie to the requesting client such that the cookie is attached to the subsequent external request to the same transaction thereby eliminating the necessity of classifying the subsequent request (C. 17, L. 46-49 and reasoning applied to Claim 1).

**Claims 3 and 11.** Mangipudi teaches re-applying the business rules to the responses of subsequent transaction requests to determine the classification of said requests based on information contained in cookie (C. 4, L. 49; C. 4, L. 66 – C. 5, L. 4). Masters teaches using said classification information contained in the cookie as long as the cookie is not expired (C. 7, L. 32-33), thereby indicating determining if reclassification information is needed for subsequent requests. The motivation to combine Mangipudi and Masters would be to provide ability to continuously identify and prioritize revenue-generating transactions over no-revenue generating transactions.

**Claims 4 and 12.** Mangipudi teaches re-applying the business rules to the responses of subsequent transaction requests to determine the classification of said requests based on information contained in cookie (C. 4, L. 49; C. 4, L. 66 – C. 5, L. 4). Masters teaches using said classification information contained in the cookie as long as the cookie is not expired (C. 7, L. 32-33), thereby indicating updating the tag (cookie) with new classification information if reclassification for subsequent requests is needed.

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The motivation to combine Mangipudi and Masters would be to continuously provide ability to identify and prioritize revenue-generating transactions over no-revenue generating transactions.

**Claims 5 and 13.** Masters teaches inserting specific information (tag) in the cookie (C. 2, L. 35-36). The motivation to combine Mangipudi and Masters would be to identify and prioritize revenue-generating transactions over no-revenue generating transactions.

**Claims 6 and 10.** Masters teaches examining (parsing) an HTTP request to determine if a Cookie is included with the HTTP request (C. 2, L. 27-29); and inserting a copy of cookie information in the cookie, and sending the HTTP response with the copy of the information in the cookie to the sender of the HTTP request (C. 2, L. 35-36). The motivation to combine Mangipudi and Masters would be to identify and prioritize revenue-generating transactions over no-revenue generating transactions.

**Claim 7.** Mangipudi teaches said system wherein the server system is a TCP/IP based server application system (C. 7, L. 56-66).

**Claim 8.** Mangipudi teaches said system wherein the server system is a Web server system (C. 7, L. 2-9).

**Claim 15.** Mangipudi teaches said system wherein application servers are connected to a gateway (C. 7, L. 10-13).

**Claim 16.** Mangipudi teaches said system including the request processor configured to receive requests from external clients and directing said requests to the application servers (C. 7, L. 5-6).

**Claim 17.** Masters teaches said system, wherein one or more of the requests received by the server system has a tag that holds a corresponding classification, wherein the response to each classified request with a tag has that tag and the response to each unclassified request has the default classification (C. 2, L. 35-36). The motivation to combine Mangipudi and Masters would be to identify and prioritize revenue-generating transactions over no-revenue generating transactions.



**Claim 19.** Mangipudi teaches using a rules based engine to classify/categorized said transaction requests to determine a type of a transaction (C. 4, L. 49; C. 4, L. 66 – C. 5, L. 4), and providing differentiated services to said categorized requests so to giving priority to one request over the other categories of transactions (C. 6, L. 9-13).

**Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi in view of Masters and further in view of Mathews (US 5,956,752).**

**Dependent Claim**

**Claim 18.** Mangipudi in view of Masters teach all the limitations of Claim 18, expect explicitly teaching that said application system is configured with a cache for holding frequently accessed information.

Mathews teaches a method and system for accessing a cache, and further teaches: *"a cache is a very fast local storage memory that is used by a processor that typically resides between the processor and main system memory. The cache decreases the latency to the slower main system memory by holding copies of code and data that are frequently requested from the main system memory by the processor. A cache may reside within the processor itself, outside the processor, or both inside and outside the processor"* (C. 1, L. 12-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mangipudi and Masters to include that said system is configured with a cache for holding frequently accessed information, as disclosed in Mathews, because it would advantageously allow to decrease processing time of said transaction requests.

***Response to Arguments***

In response to the applicant's argument that the prior art does not teach *classification tag being based on a priority-based back-end classification*, it is noted that Masters teaches said system and method for storing load balancing information with an

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HTTP *cookie* (tag) wherein information contained in the cookie (tag) includes *priority* (classification) information that identifies a *priority for processing the HTTP request* and/or *response* prior to the processing of the other HTTP communications (C. 3, L. 54-60). As per "back-end" classification, this information cannot affect the recited method steps, and does not include a structural limitation, therefore, is given no patentable weight. MPEP 2106 (II) (C) states: "*Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*" The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI (example 3): a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed. The method steps, recited in Claim 9 would be performed the same regardless whether said priority-based classification information is back-end classification information, or not.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

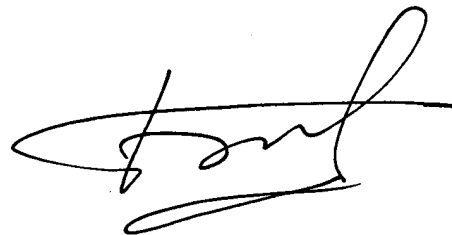
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igor Borissov  
Patent Examiner  
Art Unit 3639

A handwritten signature in black ink, appearing to read 'Igor Borissov', with a large, sweeping loop at the end.

IB

9/16/2005